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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,213	02/09/2004	Isamu Kuno	118423	6743

25944 7590 10/05/2004

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EXAMINER	
ABRAHAM, FETSUM	
ART UNIT	**PAPER NUMBER**
2826	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/773,213	KUNO ET AL.	
	Examiner	Art Unit	
	Fetsum Abraham	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,608,355. Although the conflicting claims are not identical, they are not patentably distinct from each other because apart from inclusion of the already existing isolation regions in the claim language of the patent, everything else in the claimed structure and its method of making are claimed in the prior art. Besides, it would have been obvious to one skilled in the art to include the existing isolation regions (170) in figure 2E of the patent bin the claim languages since it is an important portion of the overall structure of the prior art5. Moreover, it would have been obvious to one skilled in the art to isolate individual devices and specifically the second MOSFETs in the prior art, which serve as the anti-fuse elements from one another in order to avoid interference and current leakages between the same.

As for claims 2,10, the prior art structure has channel stop regions (121) below the isolation layers.

As for claim 3, forming MOSFETs that serve as anti-fuse elements on an SOI layer is common in the art to transform the field effect elements into thin film transistors and to guarantee total isolation from adjacent elements in the overall structure of such circuit configurations.

As for claim 4, MOSFETs formed on insulating substrates commonly have source/drain regions that go as deep s the insulating substrate. Therefore, the claimed source/drain structure is known in the art of TFT technology.

As for claims 5,17, claims 2-5 of the prior art teach the overall concept. This because the first and the second MOSFETs sharing the same substrate means that the channel regions are a portion of the substrate itself. And having the channel portion of the second transistor having a higher doping profile than that of the first transistor means the portion of the second channel is higher in concentration than the bottom part of the same. Clearly, that portion also causes a layer of high voltage breakdown in the structure.

As for claim 6, aluminum source/drain electrodes are common and commercially available.

As for claims 7,18, wells are known alternatives to bulk substrates that are utilized to MOSFETs with conductivity types that much the base substrates. Therefore, forming MOSFETs on the surface of bulk semiconducting layers or in wells remains to

be design choice that depend on expected results such as how much of leakage currents are tolerated in a given device.

As for claim 9, the isolation regions are formed by LOCOS process.

As for claims 11,15, identical isolation regions to isolate multiple elements on a common substrate are commonly formed simultaneously in order to avoid repeating the process, to save processing time and to modulate the shapes and pitches of the same.

As for claims 12,16, the source/drain regions of multiple elements on a common substrate are commonly formed simultaneously in order to avoid repeating the process and to save processing time.

As for claims 13,14 forming multiple antifuse elements and their associated sub-elements such as the claimed channel stop layers, has been notoriously known in the art of integrated circuit fabrication.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fetsum Abraham whose telephone number is: 571-272-1911. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915.

Fetsum Abraham
9/22/04